

**DEPARTMENT OF TRANSPORTATION****DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-005431**Date Inspected:** 14-Feb-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Sha Zhi**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG segments**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance Inspector (QA) Steve Hall was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

OBG outside assembly (OBG segment 4BW)

This QA observed ZPMC qualified welding personnel identified as Mr. Li Bo (067993) perform SMAW welding on weld joint identified as CA011-026. ZPMC QC identified as Mr. Yang Diang was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-P-2113.

This QA observed ZPMC qualified welding personnel identified as Mr. Yang Changming (058242) perform SMAW welding on weld joint identified as SEG019E-011. ZPMC QC identified as Mr. Yang Diang was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-P-2113.

OBG outside assembly (OBG segment 3AE)

This QA observed ZPMC qualified welding personnel identified as Mr. Sun Lingling (049339) perform SMAW welding on weld joints identified as CA02-073 and 075. ZPMC QC identified as Mr. Wang Wei Ming was present to monitor the welding process. The welding parameters as measured using QC's calibrated

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instruments appeared to be in general compliance with WPS-B-T-4113-2.

This QA observed ZPMC qualified welding personnel identified as Mr. Hu Yacheng (048047) perform SMAW welding on weld joint identified as CA02-078. ZPMC QC identified as Mr. Wang Wei Ming was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-4113-2.

This QA observed ZPMC qualified welding personnel identified as Mr. Hong Liang (200113) perform SMAW welding on weld joints identified as SEG014D-072 and 073. ZPMC QC identified as Mr. Wang Wei Ming was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-4113-2.

OBG outside assembly (OBG segment 5CW)

This QA observed ZPMC personnel fitting and tack welding the suspension brackets to floor beam web at PP035. QA noted that ZPMC has tack welded backing bars to the top and bottom plates. The edge of the backing bar has been beveled at a slope greater than that of the weld joint. This beveling of the backing bar is not shown on the WPS that was presented to this QA by QC for review. The WPS number in question is WPS-B-T-2231-TC-U4c-F. QA consulted with QC inspector identified as Mr. Yang Diang concerning this issue. Mr. Yang was unable to explain the reason ZPMC beveled these backing bars. QA then contacted ABF representative identified as Mr. Jeff Evans for assistance concerning this issue. Mr. Evans did some research to see if there have been any revisions and/or RFI's concerning these weld joints. Mr. Evans was unable to find anything concerning these joints. This QA will follow up on this issue on Monday 2/16/09 when Caltrans and ABF have a full staff on hand to assist in the research for revisions and/or RFI's. See attached photos for details.

OBG outside assembly (OBG segment 4AW, 5CE, 3BE, 4AE, 5BW and 5AW)

No significant work was being performed on these segments while QA was present.

OBG assembly bay 19

No significant work was being performed in this bay while QA was present.

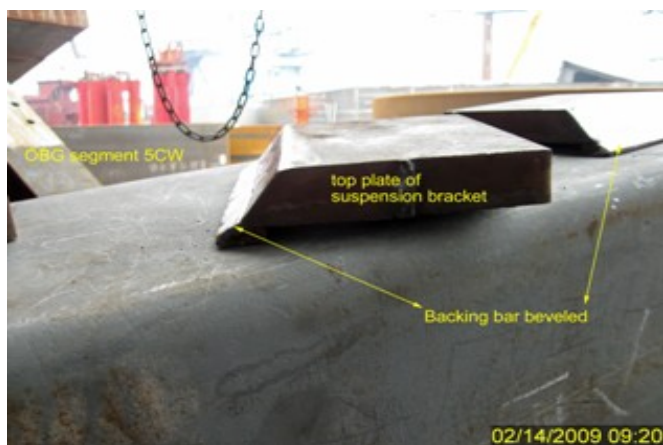
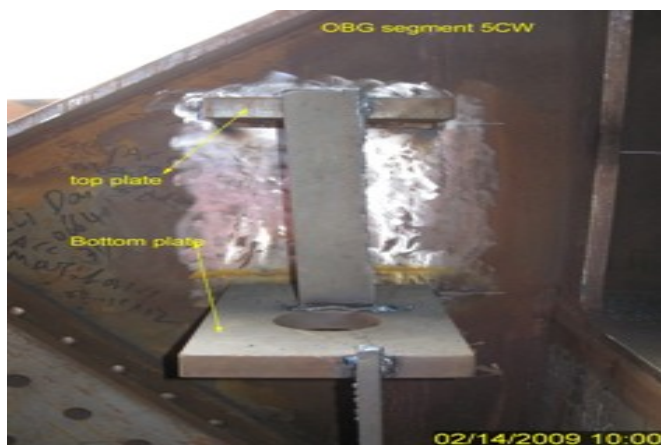
Unless otherwise noted, all work observed on this date appeared to be in general compliance with the applicable contract documents.

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### Summary of Conversations:

As mentioned above.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, 15000422372, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Hall,Steven	Quality Assurance Inspector
<b>Reviewed By:</b>	Carreon,Albert	QA Reviewer

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